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EXTENDED AFFECTIVITY AS THE COGNITION OF PRIMARY INTERSUBJECTIVITY¹

abstract

I discuss the primordial affectivity approach (Colombetti 2014) and the extended emotions theory (Krueger 2014, Slaby 2014, Candiotto 2015, Carter et al. 2016) in order to propose a novel account of “extended affectivity” (EA) as the cognition of primary intersubjectivity (EACPI). I explain why the distributed cognition model is the more convenient to understand the collective and the subjective dimension of EA. The novelty of EACPI consists in the recognition of the protocognitive valence of the affectivity, referring to the work of Colwin Trevarthen (Trevarthen 1979; Trevarthen 2011), who has demonstrated the leading role of affectivity in the neonatal intersubjectivity in neurobiology.

keywords

affectivity, primary intersubjectivity, distributed cognition, extended emotions, enactivism

Introduction Among the many novel ongoing approaches in the contemporary debate about the nature of emotions, the primordial affectivity approach (PAA) (Colombetti 2014) and the extended emotions theory (EET) (Krueger 2014, Slaby 2014, Candiottto 2015, Carter *et al.* 2016) stand out for their capacity to combine a well-defined theoretical account of the mind with the phenomenology of affectivity and the empirical works coming from cognitive science and neuroscience. Moreover, they envisage extending their scope of applicability to other fields of research, such as social psychology, sociology and technology. PAA and EET come from two different approaches to the mind – notably, active externalism and enactivism – but they have in common the recognition of the constitutive value of the environment for the realization of cognition as affectivity. In this paper, I will discuss these approaches in detail in order to propose a novel account of “extended affectivity” (EA) as the cognition of primary intersubjectivity (EACPI). Affectivity is the most primitive way in which the subject knows the environment in which she/he is embedded, and the first dynamic practice to constitute a “world in common” (Nancy 2002).

1. Contemporary trends in the theory of emotions It is possible to analyse contemporary trends in the theory of emotions by dividing them into three broad groups which are not, naturally, exhaustive and fine-grained (cf. Candiottto 2016a). The first approach is cognitivism. In the philosophy of emotion, cognitivism assumes the propositional attitude identity thesis. This thesis states that emotions are identical to propositions, or in its weaker form, the thesis maintains that emotions involve propositional attitudes. The specific judgement made by emotions is defined as “appraisal”, i.e. a judgement of value. The propositional attitude identity thesis derives from a critique of (1) feeling-centered approaches to emotions, which conceptualise emotions as bodily feelings, (2) and behaviourist programs, which are understood as inadequate to fully explain emotions’ intentionality. In contrast, within the cognitive framework, emotions are understood as occurrent states of mind with a specific intentionality. They are different from moods, which are occurrent states

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but with a general intentionality, and from sentiments and traits as dispositional states. Appraisal is also central to the second approach, the perceptual model. In this model, emotions are types of perceptions, and as perceptions are related to judgment about the empirical world, emotions are therefore related to moral judgments (Goldie 2007, Sauer 2012). As the standard cognitive approach, the perceptual model emphasizes the “feeling towards”, i. e. the intentional character of emotions, making a comparison between emotions and perceptions: just like perceptions, emotions overcome themselves in order to reach the object they are for. For this model, emotions “need not consist in articulated propositions” (De Sousa 2014: 19) and, thus, the non conceptual apprehension of the world of beasts and babies (cf. Deigh 1994) is comprehended by binding emotions with desires.

The third group is the most multifaceted and comprises approaches that identify emotions with bodily experience or that stress the strong value of body experience in the emotional arousal. Even if these approaches have some peculiar traits creating particular differences among them, one could still highlight the common rejection of the standard assumption that cognition is instantiated “centrally” by the brain only. Broadly speaking, in this third category we could count those approaches as emanating from Continental philosophy, mainly from phenomenology, existentialism and women’s philosophy. Arguably, William James may be seen as one of the founders of this varied family of approaches, since for him emotions are bodily feelings. In the apprehension of reality the bodily feeling comes first, and then the judgment of experience follows. Physiological changes precede emotions that are the subjective experience of body changes (James 1950: 173).

Outside of these three broad groups, there are many other contemporary approaches to emotions theory. Most notable are multidisciplinary approaches that combine different disciplines such as psychology, cognitive science, philosophy, epistemology, anthropology, sociology, biology and neuroscience. These approaches have the aim of providing a broader and more comprehensive model for understanding emotions. Usually, these approaches frame emotional experiences within a broader cognitive environment and can be similar to the second or the third group, or even offer a novel approach to a reformatted cognitivism.

The frameworks of the two approaches I discuss in this paper, i.e. enactivism and the extended mind hypothesis, appertain exactly to this novel and diversified multidisciplinary context. Enactivism (Varela, Thompson, and Rosch 1991; Thompson 2007), by underlying the continuity between mind and nature, creates the grounds for embodied and embedded cognition. The extended mind hypothesis (Clark and Chalmers 1998), by focusing on the cognitive valence of external tools, enlightens the mutual cognitive actions inside an extended cognitive system. Both assume a critical stance towards internalism, arguing for an active externalism where cognitive agents constitute themselves in relation to the environment whilst perception/ cognition are active forces of the sense making.

Enactivism and the extended mind hypothesis were chosen as frameworks by two very promising and novel hypotheses in affective science and philosophy of emotions discussed in detail below, the Primordial Affectivity Approach (PAA) and the Extended Emotions Thesis (EET).

PAA represents the theoretical model for a very detailed analysis of enactive affectivity delivered by Colombetti in connection with the new results coming from affective science. PAA grounds the comprehension of emotions in an account of the mind that emphasizes its embodied and affective character, understanding affectivity as the primordial way in which an organism understands, decides and acts in a particular environment. Criticizing the standard conception of cognitive science that understands emotions and moods as transitional state of minds (emotions very quick, moods longer), Colombetti comprehends the mind as always

2. Primordial Affectivity and Extended Emotions

affective in its origin, since affectivity is understood as the structural pattern in which every form of life produces itself and its world. Emotional events are expressions of the whole living organism embedded in the world. Thus, PAA is a dynamic systems approach to affectivity, in which sense-making is the leading notion for understanding the affective structural relationship which all living systems have with the environment. For Colombetti, saying that affectivity is primordial means that it pertains to all living beings – including those without a neural system – because affectivity is enacted by the whole organism. In this way she strongly criticizes the mainstream neuro-centric thinking about mind in general, and emotions in particular.

EET is understood in different ways. Joel Krueger (2014) discusses the hypothesis of the “environmentally extended emotions” for which there are cases in which the emotions extend the body boundaries and are constituted by external factors. As it was well noticed by Achim Stephan, Sven Walter, and Wendy Wilutzky (2014), not all influences performed by the environment might be understood as extension. On the contrary, two very specific traits should be present – at least in the orthodox version of the extended mind hypothesis – the internal representations and the active structuring of the environment. External factors may also be represented by other human beings – i.e. not only in technological tools – and, thus, Jan Slaby (2014) understands “extended emotions” as a case of “collective emotions”, or with Krueger’s words as “collectively extended emotions”, within the so-called “third wave” of the extended cognition. Emotions should be intended both as emotions that are “common” among the members of a group, and as emotions that are constituted by all the members of a group at the same time, developing what Slaby calls “the political philosophy of mind”, i.e. the situated and engaged stance in the philosophy of mind not restricted to abstract theoretical investigations.

Following Slaby’s conceptualization of EET, Candiottto (2015) stresses how the mind’s extension is not only a question of location but also of determining the type of knowledge that is realized: such knowledge is not just “shared” within a group, but it is also extended in the sense of enhanced or maximized by a collective inquiry. In this precise aspect, this formulation of EET found in the Adam Carter, Emma Gordon and Orestis Palermos’ approach a common root. Their goal is to understand EET as a novel application of the hypothesis of extended cognition (HEC), i.e. the claim that some cognition extends beyond skin and skull to parts of the external world. Carter *et al* argue for a fruitful combination between HEC and cognitivist approaches to emotion. According to this approach, the cognitions on which emotions supervene are dynamic and extended processes.

3. Primordial affectivity cum and versus extended emotions

The common ground between these two approaches is represented by the general view of an embodied, situated and environmentally active mind.

Colombetti and Slaby subscribe to the idea of an affective intentionality, probably because of their common phenomenological roots (the Merleau-Pontyan lived body) and Slaby’s notion of “interactive coupling” (“the continuous interaction with some expressive environmental structure”, Slaby 2014: 37) makes his formulation of EET as enactive (his *motto* is “enaction rules extension”), exactly as Colombetti does, merging “primordial affectivity” and “sense making”.

Phenomenology and enactivism are not explicitly considered in the extended mind hypothesis² and in the more orthodox formulation of extended emotions by Carter *et al*, which

2 Andy Clark (1997) is one of the founder of the model of embodied cognition and he dealt with the embodied mind and enactivism throughout the years (cf. Clark 2016). Therefore, this division should not be understood rigidly.

are framed by novel discoveries in the cognitive science field. Nevertheless, this does not mean that they are incompatible, since scientific discoveries could provide evidence of our phenomenological experiences, and conversely, our phenomenological experiences could stimulate new scientific research bringing them new intuitions. Therefore, Slaby discusses the extended mind hypothesis – he undertakes the “integrationist” second wave approach of Menary (2010) and not the parity principle of Clark and Chalmers (1998) – and one of Colombetti’s main goal is to bring the philosophical idea of primordial affectivity to the contemporary debate in affective science, and so to shape primordial affectivity into scientific results. In particular, Colombetti (2013) advances the “neuro-physio-phenomenology” for the scientific study of emotion experience, combining phenomenological first-person data about emotional feelings and third-person data about mind and body activity. Thus, from a methodological point of view, it is possible to underline the common effort of PAA and EET to overcome the division between humanistic and scientific research, as in the case for many contemporary philosophical researches that embrace the idea of a naturalized philosophy. Both PPA and EET reject psychological internalism or mentalism, and understand appraisal as constituted by the activity of the whole situated organism. For PPA it is not possible to distinguish appraisal from emotion and, following this path, I depict extended emotions as epistemic emotions, enlightening the inextricable bond between emotions and cognition, starting from the neuroscience account which demonstrates how cognitive and emotional functions are so deeply integrated in the brain (Freeman 2000, Lewis 2005). At the same time, it is crucial to understand what “constituted by” means within these two models as it is exactly in this point that they are arguably very different. I will highlight this by analysing some specific contrasts.

First of all I must emphasize that, unlike PAA, EET is not an already well-developed and unified theory. Therefore the discussion below may miss some of the specific notions that pertain to each single approach within EET

On the one side (Colombetti, Slaby, CandiOTTO) we find the idea that emotions belong to a lived body that acts inside the environment, on the other (Carter *et al.*) the idea that emotions supervene on mental states and that, even if extended in an environment, they pertain mainly to the brain activity. In fact, the circularity between brain and external environment (Carter *et al.*’ EET) and enactive coupling are not at all synonymous. In fact, following the standard formulation of extended mind by Clark and Chalmers (1998), the circularity between brain and environment is understood as causality, for which not only the brain depends on the environment but part of the environment constitutes the cognitive activity of the brain. Instead of circular causality, enactive coupling points to the inextricable and interdependent structural relation between an organism and its environment and cognition is exactly understood as the dynamical product of this relation.

According to enactivism, cognition is realized (“enacted”) by the whole living organism embedded in the world and so primordial affectivity represents for Colombetti the specific relation that every form of life (also the simplest one, as bacteria) has with its environment. Thus, affectivity could be understood as the self-organizing pattern of a living organism, modelled by the continuous interchange with the environment. Also EET stresses the constitutive relation with the environment as source of the emotional experience, but for AAP the agents are every living being and for EET not, since it describes the emotional cognition of an evolved human brain and pushes its discoveries to research in artificial intelligence and in sociological research about the relations among humans. This does not mean that AAP is not interested in the study of humans’ affectivity but that its account on the more complex emotional experiences of the humans are framed into the basic structure of life and are understood as highly integrated configuration of the same process of self-organisation.

As I have explained above, for AAP affectivity pervades the mind, it is not just an occurrent state of a “neutral” mind. EET, on the contrary, assumes the standard cognitive analysis of emotions as occurrent state of minds and so extended emotions are the very specific and temporally determined states of mind that are realized just in the very determined conditions of the cognitive integration with the environment. This does not mean that EET is less extreme than AAP: in fact, EET claims that emotions overcome the feeling body since extended emotions are beyond the brain *and* the body. I think that AAP could not accept this conclusion since it frames affectivity exactly as structure of a body. Even if in the conclusion of her book (2014, chapter 7) Colombetti has asserted that enactive emotions do not deny relationship with others, she has nevertheless mainly described them from the perspective of an individual organism. She has not argued for interrelatedness or intersubjectivity as primitive (see par. 4 for my thesis about it).

The last point of difference I would underline has to do with the metaphysical assumption undertaken (explicitly or implicitly) by the two approaches. Even if EET claims to be metaphysical neutral (a functionalist approach), I think that it is possible to detect in it a realist approach, broadly speaking, both ontic and epistemic. On the contrary, for PAA it becomes meaningless to speak about “internal world” and “external world” since the action is realized (enacted) in a fully integrated environment understood as the whole. For AAP cognition is a form of interpretation, while in contrast, EET struggles for an objective knowledge framed by the results of science. Therefore, it is notable that the different premises of the two approaches, a functionalist cognitivism even reformed, and continental phenomenology combined with enactivism, have a strong impact in AAP and EET, making them very dissimilar despite having in common the critiques of internalism and the valorization of the structural relation with the environment. In the meantime, we should not assume their incompatibility.

4. Extended affectivity

Arguably, it is fruitful to combine the core idea of PAA, i.e. the understanding of affectivity as the whole experience of a living body, with the EET claim about extended cognition, in order to achieve the novel notion of “extended affectivity” (EA). With EA, extended cognition is not only the extension of mental states but the cognition of the entire living body, where the whole of an individual’s experience is framed within intersubjectivity, understood as primitive. EA poses a lot of challenges to PAA and EET, in particular to PAA to dismiss the notion of complete autonomy of the living organism, while EET is challenged to be open to wider horizons of inquiry connected to the idea of the extended consciousness (Noë 2004, 2010) and to a more liberal interpretation – as it is defined by its proponent – of the extended mind hypothesis, i.e. the “socially extended mind” (Gallagher 2013), or third wave. At the same time EA recognizes its debt to both PAA and EET, in particular the constitutional relationship with the environment benefits from the results of PAA, as with the notion of cognitive extension from EET. Thus, my constructive *motto* is to combine the benefits whilst reducing the limits of the two, with the purpose to propose a new approach that will not merely be a sum of the two, but it would even recognize the strong dependency between them. To clarify: the strength I would take from EET is the core idea of extension and from PAA the critique to reduce affectivity to an “emotional occurrent event”. The area I would improve is the social and intersubjective dimension of the extension, focusing not only on the extension in technological tools but developing the idea of primordial affectivity within intersubjectivity as primitive.

EA is not a totally novel conception since it has to do with the philosophical ideas coming from phenomenology and existentialism that the experience is always shared and mutual and that agency is understandable as “we-intentionality”, and from social ontology and epistemology

where the “we” is the main indicator of social action, which implies a “plural subject” and not a simple sum of two or more individuals (Gilbert 1989). In the meantime, the word “extended affectivity” starts to be detectable in few very new articles (Colombetti 2015, Fuchs & Koch 2014) on philosophy of emotions. Nevertheless, the novelty of my account consists in the recognition of the protocognitive valence of the affectivity through the conceptualization of social developmental and psychological researches. I simultaneously point to the necessity of describing “affectivity” as this specific protocognitive ability, overcoming the dualism between cognitive and non-cognitive mental states, and also to recognize intersubjectivity as primitive.

I assume the notion of EA as the cognition of primary intersubjectivity (EACPI). Much has been done in primary intersubjectivity, especially by social and developmental psychology. Specifically, using the notion of “primary intersubjectivity”, I am referring to the pioneer work of Colwin Trevarthen (Trevarthen 1979, Trevarthen 2011), who has demonstrated the leading role of affectivity in the neonatal intersubjectivity (but also in the belly!) in neurobiology.

4.1. Primary intersubjectivity

[...] they show themselves capable of making an effort of will and attentiveness to take part in an emotionally charged reciprocation of arbitrary ways of moving, and so to become part of a dramatic narration of being in companionship with another person. (Trevarthen 2011: 124)

Joel Krueger (2013) has already underlined how the physical interventions caregivers use to regulate infant attention and emotion are part of the infant’s socially extended mind; in my opinion the best goals that Krueger’s paper has attained were to have stressed how the cultural norms are mediated by the body actions and, in the meantime, to have underlined the key role performed by the body in the cognitive development.

The best example of EACPI is the mutual relationship between a mother and her infant (see par. 4.2). Nevertheless, following Shaun Gallagher (2001)³, I do not think that EACPI pertains only to mothers and infants but that continues to be active in all social animals at all life stages, as the primordial source of intersubjectivity.

Krueger (2014) has underlined that collective extended emotions are easily detected in infancy, but hardly in adults – even if he provides some examples from music and dance – for which the notion of “individual extended emotions” is more useful, i.e. the recognition of the constitutive role of external factors for the individual emotional arousal. On this point my approach to EA would underline that, even if adults’ “individual extended emotions” are more prominent, this does not mean that the collective stance may be not at work on the back as primordial source of intersubjectivity. With the development of the cognitive skills, primary intersubjectivity will be combined with the secondary and the tertiary intersubjectivity but its role cannot be denied in the adults intersubjectivity, especially regarding the researches on empathy. Anya Doly (2014) claims that primary intersubjectivity is the empathic responsiveness to the others⁴. Following this path, I assert that primary intersubjectivity plays in the background in adults, and has an extraordinary role in our mutual desire to constitute a “world in common” (Nancy 2002).

The biological constitution of intersubjectivity, in the meantime, should be combined with

³ “Primary, embodied intersubjectivity is not primary simply in developmental terms. Rather, it remains primary across all face-to-face intersubjective experiences[...]”. Gallagher 2001: 91.

⁴ “Primary empathy is affective reversibility, which renders us susceptible to another’s gaze, to their voice, to their touch.” Daly 2014: 237.

the recognition of the first-person experience. Regarding HEC, Orestis Palermos and Duncan Pritchard (Palermos & Pritchard 2013) designed a model that seeks to avoid of the extremism of conceptualization of knowledge as realized only “inside” or “outside” the boundaries of the skin. To achieve it, they combine research on virtue epistemology with the distributive cognition framework for group knowledge, valorizing the specific cognitive skills of every agent in the distributed process. Even if they do not explicitly take emotions into account in their model, I do think that it is a very useful way of understanding the peculiar interweaving between collective and first-person affective experience. In my opinion the distributive cognition hypothesis might strengthen the intersubjectivity vision of emotions for which the emotional embodied experience of a subject is not only affected by but also strengthened by the relationships with others. Emotions are not private state of minds but active and dynamic processes between subjects. They are the forthcoming of our active interaction with the world, clarifying how the regulation of the self always involves the others, and without losing the ontological status of the subject. Understanding EA for adults within this framework permits to achieve the notion of “distributed affectivity” (DA), i.e. this specific affective state of the group, and of its single components. Arguably, DA may develop the idea of collectively extended emotions without neglecting their first-personal character.

4.2. The constitutive relationship between the mother and her fetus

Let analyze in details our key case of EACPI. We should notice how the mother and the fetus⁵, and then the infant, are bound together by a constitutive relation moved by the biological needs of survival and development. They form a group (“common intercorporality”, Fuchs & De Jaegher 2009) understandable as a single entity or as a systemic dyad in its developmental goals. For the infant this relationship is constitutive of her/his growth in terms of evolutions, adaptations and survival in a specified environment. The affective relation between mother and infant, established in the repeated actions of care performed by the mother, builds the protocognition of the infant. As Trevarthen has demonstrated, infants are born with a natural propensity to intersubjectivity,

[...] with motives and emotions for actions that sustain human intersubjectivity. [...]. Their Intelligence is prepared to grow and be educated by sharing the meaning of intentions and feelings with other humans by means of many expressive forms of body movement that may be perceived in several modalities. (Trevarthen 2011: 121).

They are constitutively bound together not only for biological reasons – think of the expression “you are the blood of my veins, you are bone of my bone” – but also for social reasons. Intelligence has evolved in social animals for actions to be shared socially⁶. It is well known that the symbiotic relations between a mother and infant could also become pathological for the mother (cf. for example the depression post partum) and for the development of the infant’s autonomy; nevertheless, it is in its good performance that the infant learns to be a social being.

Arguably, the constitutive “use” of the mother by the infant as a source of care, nutrition, etc. makes their relationship a case of extended affectivity as extended protocognition. The constitutive relation with the mother constitutes the affectivity of the infant and some

5 I’m referring here to the natural mother and not to unspecified caregivers to stress the biological link at work. Nevertheless, doing so I do not deny the possibility to detect these characteristics also in relations to other caregivers, in particular understanding the crucial role performed by the social practices towards our biological patterns.

6 “The creative output of natural intelligence in moving animal bodies, its conation and emotion”, Trevarthen 2011: 122.

protocognitive states arise exactly in this process on “interbodily resonance” (Fuchs & Koach 2014). The love and care of the mother for the infant bounces back to the infant producing not only attachment but also a feeling of affection for her/his source of survival and, thus, a protocognition of intersubjectivity as relational knowing. Claiming that what is extended is affectivity means that this extension is not occasional and momentary⁷ (as would be if what is extended was just emotion as an occurrent state of mind) and not necessarily moved by representations (as cognitions). This kind of extension is existential and constitutes the subject as “being with” (Nancy 1996, CandiOTTO 2016b). As Trevarthen has claimed, the self-regulation is *alteroceptive*⁸. Affectivity is the more primitive way in which the subject is open to the others and constitutes itself as “being with”, and the primordial intersubjectivity is the source for protocognition as affectivity.

Having discussed PAA and EET and having provided some very specific points of difference between them, I introduced my approach of extended affectivity as primary intersubjectivity (EACPI), arguing for the protocognitive value of affectivity. Moreover, I explained why the distributed cognition model is the more convenient to understand, at the same time, the collective and the subjective dimension of EA.

I think that this topic is both intriguing and tricky and that further investigations are required, especially regarding the elaborations of replies to the critics of the representationalists for whom, since cognition is representation, it cannot be performed within primary intersubjectivity. Although more work is required in this field of research, it seems fair to conclude that one reply may arise from an analysis of the embodied access to intersubjectivity as protocognitive and of the primordial empathic responsiveness.

5. Conclusion

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⁷ Fuchs and Koach (2014) have demonstrated the long-term effects of the embodied interaffectivity through the recognition of the “intercorporeal memory”.

⁸ “Social animals have evolved ways of inter-acting, of moving in complementary or coordinated ways and sensing the power and purposes of one another’s movements intersubjectively, so that, by cooperating in their motives, they can increase their individual and collective benefits and their adaptation in a sustaining ecology. They make their autonomic self-regulations of vital state apparent to one another so they can act emotionally in ‘sympathetic’ ways.[...] Their social life requires that they evaluate the purposes of one another by detecting intentions, interests and feelings from the energetic and self-regulating qualities of each other’s movements, alteroceptively”, Trevarthen 2011: 123.

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